

## REMARKS

### I. Introduction

Claims 1 and 8 are pending in the present application. In view of the preceding amendments and following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

### II. Claims Objections

The Office Action objects to claims 3 and 4 due to alleged informalities. The Office Action states that the use of the term "preferably" is extraneous because the claims are interpreted by the broadest reasonable interpretation. It is suggested in the Office Action to delete the limitation "preferably".

In response, Applicant have amended claims 3 and 4 such that the terms preferably have been deleted. As the terms "preferably" have been deleted, applicants respectfully submit that the claim objections have been obviated and withdrawal of the objections is respectfully requested.

### III. Rejection of Claims 1 to 8 Under 35 U.S.C. § 103(a)

Claims 1 to 8 were rejected under 35 U.S. C. § 103(a) as being unpatentable over applicants' disclosure in the prior art in view of U.S. Patent 6,386,270 ("Kandev"), and further in view of U.S. Patent 4,475,721 ("Pamart") and U.S. Patent 3,773,503 ("Kranz"). Applicants respectfully submit that the combination of references do not render obvious claims 1 to 8 for the following reasons.

Claim 1 relates to a method for the control tempering of a casting trough integrated between a supply vessel of a molten metal that has copper or a copper alloy, and at least one casting mold. Claim 1 recites providing at least a partial lining on at least one trough wall in a trough floor of a casting trough, the partial lining having a specified electrical resistance approximately between about  $10^{-1}$   $\Omega\cdot m$  and  $10^{-6}$   $\Omega\cdot m$  and the partial lining being resistant to heat of the molten metal. Claim 1 further comprises the step of inductively heating the lining layer by a electrical heating device that is arranged outside the lining layer.

Claim 5 relates to a casting trough. Claim 5 recites at least one trough wall attached to a trough floor for holding a molten metal. Claim 5 also recites an interior lining layer disposed on at least one-third of an interior surface of the casting trough. The interior lining layer resistant to a heat of a molten metal, the interior lining layer having a specific electrical resistance approximately between  $10^1 \Omega \cdot \text{m}$  and  $10^6 \Omega \cdot \text{m}$ , the lining interior layer having a thickness ranging approximately between 9mm and 150mm. Claim 5 also recites a heating device having conductors that are energized with electric current. The conductors arranged circumferentially at least in a longitudinal direction of the at least one trough wall, so the lining layer can be heated by the device.

Applicants respectfully submit with a combination of references do not provide all of the features of the claims at the time of the invention. Applicants respectfully submit that Kandev et al. provide a date of patent of May 14, 2002 with an application filing date of June 18, 2001. The current application successfully claims priority to German application 100 59 744 dated December 1, 2002 as indicated in the corrected filing receipt obtained by the applicants. Applicants respectfully submit that the foreign priority date predates the Kandev et al. reference date of patent and application filing date. Kandev et al., therefore, is limited to providing information obtained by Kandev et al. after the date of the invention in the present application. The addition of Pamart and Kranz et al. to the disclosure of the present application does not render obvious claims 1 and 5. Pamart allegedly relates to an induction heated casting channel with graphite sleeve. Applicant respectfully submits that Pamart does not disclose or suggest providing at least a partial lining on at least one trough wall the trough floor of the casting floor, the partial lining having a specific electrical resistance approximately between  $10^1 \Omega \cdot \text{m}$  and  $10^6 \Omega \cdot \text{m}$  and the partial lining being resistant to heat of the molten metal. Pamart does not disclose or even suggest any specific electrical resistances.

Applicant respectfully submits that Kranz does not disclose or suggest providing at least a partial lining on at least one trough wall the trough floor of the casting floor, the partial lining having a specific electrical resistance approximately between  $10^1 \Omega \cdot \text{m}$  and  $10^6 \Omega \cdot \text{m}$  and the partial lining being resistant to heat of the molten metal. Kranz does not disclose or even suggest any specific electrical resistances.

Applicants respectfully submit that the cited references, either singularly or in combination, do not disclose or suggest the features of claims 1 and 5 and as a result, the rejection should be withdrawn.

Claims 2 to 4 depend from claim 1 and therefore include all of the features of claim 1. Claims 2 to 4 should be patentable for at least the reasons provided in relation to claim 1.

Claims 6 to 8 depend from claim 1 and therefore include all of the features of claim 5. Claims 6 to 8 should be patentable for at least the reasons provided in relation to claim 5.

### **III. Conclusion**

It is respectfully submitted that all pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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